# Comparisons of Job Characteristics

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**
**Associated Occupation: Statisticians (15-2041)**


Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies


| | |
|---|---|
| << | Focus occupation element is much lower |
| < | Focus occupation element is lower |
| 0 | Focus occupation element is at a similar level |
| > | Focus occupation element is at a higher level |
| >> | Focus occupation element is at a much higher level |

## Knowledge

**Similarity of Focus Occupation to Associated Occupation: 82**

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**
**Associated Occupation: Statisticians (15-2041)**

| Associated Occupation's Key Knowledge Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|---|---|---|---|---|---|
| Mathematics | 9.2 | 15.7 | 18.3 | > | Current knowledge level is likely sufficient |
| Computers and Electronics | 8.4 | 15.1 | 22.8 | >> | Current knowledge level is likely more than sufficient |
| Biology | 3.7 | 7.1 | 3.3 | << | Extensive education and/or training may be required |
| Medicine and Dentistry | 3.7 | 6.2 | 2.4 | << | Extensive education and/or training may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

## Skills

**Similarity of Focus Occupation to Associated Occupation: 77**

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**
**Associated Occupation: Statisticians (15-2041)**

| Associated Occupation's Key Skills Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|---|---|---|---|---|---|
| Mathematics | 6.2 | 15.7 | 11.3 | << | Extensive development of skills in this area may be required |
| Critical Thinking | 10.8 | 14.6 | 13.3 | 0 | Current skill level may be sufficient |
| Programming | 2.2 | 10.8 | 12.4 | > | Skill level is likely sufficient |
| Science | 4.5 | 10.6 | 9.4 | < | A higher skill level may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

## Abilities

## Similarity of Focus Occupation to Associated Occupation: 96

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**
**Associated Occupation: Statisticians (15-2041)**

| Associated Occupation's Key Abilities Elements | Average Rating, All Occupations | Associated Occupation's Rating | Focus Occupation's Rating | Evaluation of Focus Occupation | |
|---|---|---|---|---|---|
| Mathematical Reasoning | 6.3 | 16.1 | 10.8 | << | Extensive improvement in abilities may be required |
| Deductive Reasoning | 10.6 | 15.4 | 14.6 | 0 | Current ability level may be sufficient |
| Inductive Reasoning | 10.2 | 14.4 | 14.1 | 0 | Current ability level may be sufficient |
| Written Comprehension | 11.0 | 14.4 | 13.1 | 0 | Current ability level may be sufficient |
| Information Ordering | 9.9 | 14.2 | 12.6 | < | Some improvement in abilities may be required |
| Written Expression | 9.8 | 13.9 | 12.0 | < | Some improvement in abilities may be required |
| Number Facility | 6.3 | 13.0 | 9.8 | << | Extensive improvement in abilities may be required |
| Category Flexibility | 9.0 | 12.2 | 12.4 | 0 | Current ability level may be sufficient |
| Flexibility of Closure | 7.8 | 10.2 | 8.3 | < | Some improvement in abilities may be required |

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

## Similarity of Focus Occupation to Associated Occupation: 86

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**
**Associated Occupation: Statisticians (15-2041)**

| Work Activities | Exclusivity of Activity |
|---|---|
| Advise governmental or industrial personnel | 28 |
| Analyze scientific research data or investigative findings | 27 |
| Collect scientific or technical data | 30 |
| Collect statistical data | 47 |
| Communicate technical information | 4 |
| Compile numerical or statistical data | 38 |
| Confer with research personnel | 50 |
| Confer with scientists | 54 |
| Create mathematical or statistical diagrams or charts | 43 |
| Develop mathematical ideas or interpretations | 85 |
| Develop mathematical simulation models | 70 |
| Develop or maintain databases | 30 |
| Develop policies, procedures, methods, or standards | 21 |
| Develop tables depicting data | 33 |
| Explain complex mathematical information | 30 |
| Make presentations | 13 |

| | |
|---|---|
| Plan scientific research or investigative studies | 48 |
| Prepare reports | 8 |
| Prepare technical reports or related documentation | 22 |
| Recommend further study or action based on research data | 60 |
| Use computers to enter, access or retrieve data | 3 |
| Use knowledge of investigation techniques | 16 |
| Use mathematical or statistical methods to identify or analyze problems | 30 |
| Use quantitative research methods | 35 |
| Use relational database software | 26 |
| Use scientific research methodology | 21 |
| Use spreadsheet software | 18 |
| Use word processing or desktop publishing software | 17 |
| Write scholarly or technical research papers | 36 |

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

**Similarity of Focus Occupation to Associated Occupation: 83**

**Focus Occupation: Computer and Information Scientists, Research (15-1011)**
**Associated Occupation: Statisticians (15-2041)**

| Tools and Technologies | Exclusivity |
|---|---|
| Computer data input devices | 2 |
| Computer printers | 2 |
| Computers | 1 |
| Content authoring and editing software | 1 |
| Data management and query software | 1 |
| Development software | 4 |
| Industry specific software | 1 |
| Operating environment software | 12 |

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.